MONTHLY WEATHER REVIEW,

MAY, 1881.

(General Weather Service of the United States.)

WAR DEPARTMENT,

Office of the Chief Signal Officer,

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

INTRODUCTION.

In preparing this REVIEW the following data, received up to June 20th, have been used, viz: the regular tri-daily weather charts, containing the data of simultaneous observations taken at 133 Signal Service stations and 15 Canadian stations, as telegraphed to this office; 197 monthly journals and 174 monthly means from the former, and 15 monthly means from the latter; 212 monthly registers from Voluntary Observers; 58 monthly registers from United States Army Post Surgeons; Marine Records; International Simultaneous Observations; monthly reports from the local Weather Services of Iowa, Nebraska and Missouri, and of the Central Pacific Railway Co.; reliable newspaper extracts; special reports.

BAROMETRIC PRESSURE.

The distribution of mean atmospheric pressure over the United States and Canada for the month of May, 1881, is shown by isobaric lines (in black) upon Chart No. II. The area of low pressure, which remained about central over New England and the Canadian Maritime Provinces during the past three months, has now disappeared, being replaced by pressures ranging from 30.05 to 30.11, which are the highest on record for any June since 1874, and together with the Northern Pacific coast, are the regions of highest pressure for the month. The regions of lowest pressure occupy the Upper Mississippi and Lower Missouri valleys and California. Compared with the preceding month, the pressure is considerably higher east of the 87th meridian, ranging from +0.05 to +0.46, while to the westward of that boundary a decrease is observed, ranging from —0.02 to —0.14. Compared with the same month in previous years, the disposition of pressure is very much the same, except the remarkably high area over the Canadian Maritime Provinces. Heretofore the pressure has averaged about 29.95 in this section, while the high areas were common to the Northern Pacific coast and the Eastern Gulf States. It is interesting to note in this connection that in the preceding month (April) the lowest pressures for many years, prevailed over the Canadian Maritime Provinces, while in the present month, the reverse prevails to even a greater degree.

Departures from the Normal Values for the Month.—The pressure is everywhere above the normal, except in the Gulf States (excluding Texas) Florida and along the Pacific coast. From the interior of the country the departures increase to the east and west, the areas of greatest deviations coinciding with the regions of highest and lowest pressure, viz: New England and the Missouri valley. Along the Atlantic coast the departures steadily increase from —0.01 inch at Jacksonville to +0.13 inch at Eastport and on the summit of Mt. Washington, the latter being the largest reported for the month. Over the interior the departures increase from —0.01 inch at New Orleans to +0.10 inch at Bismarck, while along the Pacific coast the reverse prevails as you pass northward, diminishing from —0.07 inch at San Diego to —0.01 inch at Portland, Or. At Rocky Mountain stations a variation is shown as follows: from +0.04 inch at Santa Fe to +0.08 inch at Cheyenne and Pikes Peak. Salt Lake City reports a change of +0.01 inch, Key West, —0.03, and Punta Rassa —0.07. Stations maintaining a normal condition are as follows: Galveston, Ft. Gibson, St. Vincent and Wilmington.